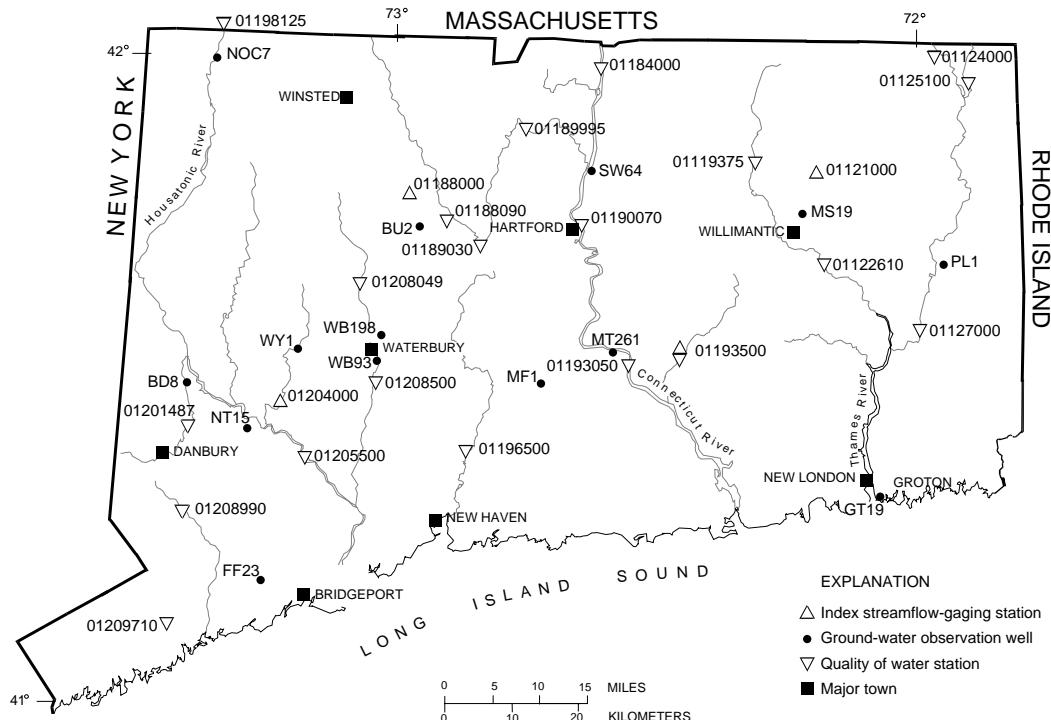


U.S. Department of the Interior U.S. Geological Survey



WATER-RESOURCES CONDITIONS IN CONNECTICUT, OCTOBER 2002

The USGS provides maps, reports, and information to help others manage, develop, and protect America's water, energy, mineral, land, and biological resources.



DATA-COLLECTION SITES USED IN THIS REPORT

This report contains a small part of the ground-water, surface-water, and water-quality data collected by the USGS at sites in Connecticut. More complete information may be found in the annual Water-Data Report. Data for this report were collected by the USGS in cooperation with the Connecticut Dept. of Environmental Protection.

For more information on USGS programs in Connecticut, please contact Virginia de Lima (District Chief); 101 Pitkin St., East Hartford, CT 06108; phone (860) 291-6740; fax (860) 291-6799; dc_ct@usgs.gov

Additional earth science information, including this document, is on the USGS Home Page on the World Wide Web at <http://www.usgs.gov> or the Connecticut District home page at <http://ct.water.usgs.gov>. For more information on all USGS reports and products (including maps, images, and computerized data), call 1-888-ASK-USGS.

INDEX TO INFORMATION

| | | | |
|------------|---|---------------|---|
| Data Sites | 1 | Water Quality | 3 |
| Streamflow | 2 | Ground Water | 4 |

STREAMFLOW (measured in cubic feet per second)

PROVISIONAL DATA

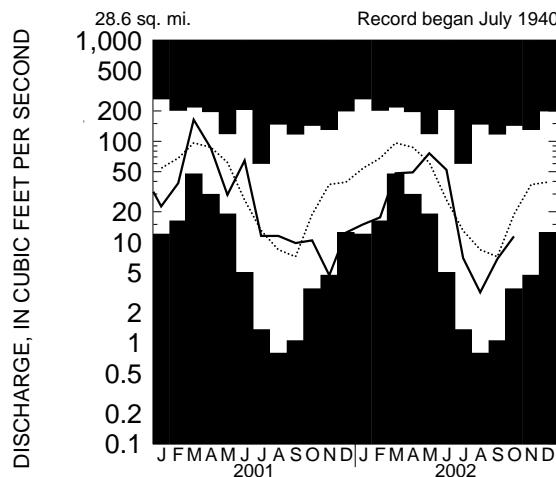
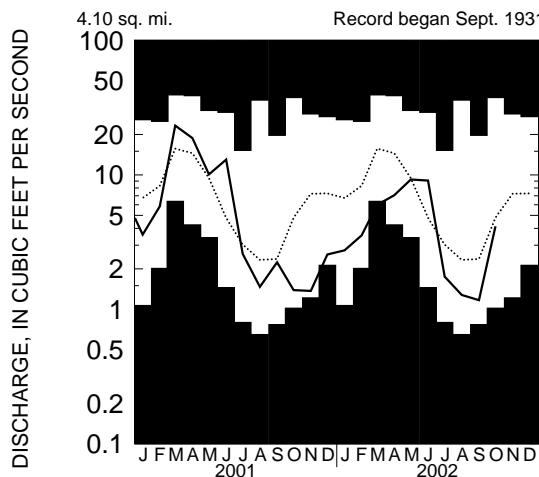
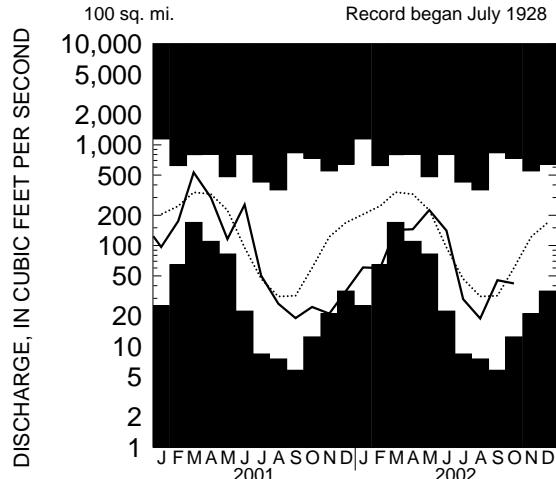
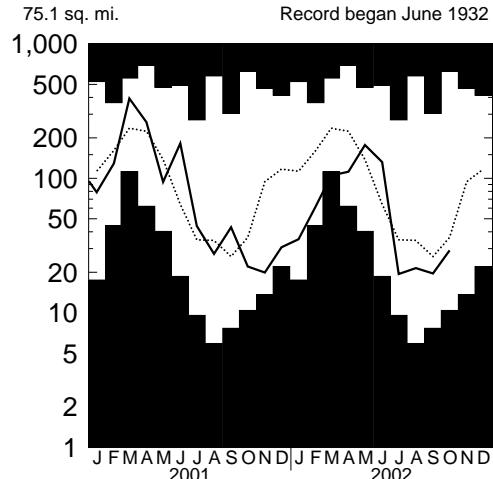
Streamflow across the State was in the below-normal to normal range. Flow at Mount Hope River (NE Connecticut) fell to the below-normal range after 1 month in the normal range. Flow at Burlington Brook (NW Connecticut) rose to the normal range from the below-normal range. Flows at Salmon River (SE Connecticut) and Pomperaug River (SW Connecticut) fell to the below-normal range from the normal range. Across the State, mean streamflow for October averaged 55 percent of the October long-term median values.

| USGS STREAMFLOW-GAGING STATION NAME AND NUMBER | OCT. 2002 MEAN | SEPT. 2002 MEAN | OCT. 2001 MEAN | OCT. MAXIMUM VALUE (year recorded) | OCT. MINIMUM VALUE (year recorded) | OCT. MEDIAN (1971-2000) |
|--|----------------|-----------------|----------------|---------------------------------------|---------------------------------------|----------------------------|
| MT HOPE RIVER (01121000) | 11.4 | 6.83 | 10.4 | 144 | 1956 | 21.7 |
| BURLINGTON (01188000) | 4.15 | 1.17 | 1.39 | 37.6 | 1956 | 5.74 |
| SALMON RIVER (01193500) | 42.2 | 45.3 | 24.6 | 734 | 1956 | 73.9 |
| POMPERAUG (01204000) | 29.1 | 19.6 | 14.8 | 625 | 1956 | 73.7 |

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

Shaded areas on graphs show highest and lowest monthly mean discharge of record.

— Current record Median (1961-1990)

MOUNT HOPE RIVER NEAR WARRENVILLE**BURLINGTON BROOK NEAR BURLINGTON****SALMON RIVER NEAR EAST HAMPTON****POMPERAUG RIVER AT SOUTHBURY**

CHEMICAL, PHYSICAL, AND BACTERIOLOGICAL QUALITY OF SELECTED STREAMS IN CONNECTICUT

→ PROVISIONAL DATA ←

[Station locations shown on front page; --, not applicable; —, not available; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using membrane filter method with immediate incubation; col/100 mL, colonies per 100 milliliters; K, results based on colony count outside the acceptable range (non-ideal colony count)]

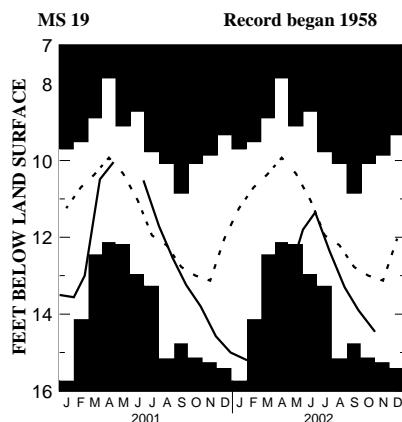
| USGS WATER-QUALITY STATION NAME AND NUMBER | SAMPLE DATE IN 2002 | STREAMFLOW/ % FLOW DURATION | SPECIFIC CONDUCTANCE (in $\mu\text{S}/\text{cm}$ at 25°C) | WATER TEMPERATURE (°C) | DISSOLVED OXYGEN CONCENTRATION (mg/L)/PERCENT SATURATION | FIELD PH | FECAL COLIFORM (COL/100 mL) | ENTEROCOCCI (COL/100 mL) |
|---|------------------------|-----------------------------------|---|------------------------------|---|----------|-----------------------------------|-----------------------------|
| 01119375 Willimantic R. at Merrow | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01122610 Shetucket R. at South Windham | 10/15 | 176 / -- | 156 | 11.0 | 10.0 / 89 | 7.2 | 50 | 140 |
| 01124000 Quinebaug R. at Quinebaug | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01125100 French R. at North Grosvenordale | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01127000 Quinebaug R. at Jewett City | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01184000 Connecticut R. at Thompsonville | 10/31 | 9,400 / 57 | 151 | 8.5 | 11.8 / 100 | 7.4 | 23 | 10 K |
| 01188090 Farmington R. at Unionville | 10/2 | 150 / 98 | 129 | 18.0 | 10.0 / 106 | 7.3 | 400 | <1 K |
| 01189030 Pequabuck R. at Farmington | 10/3 | 24.4 / -- | 423 | 20.0 | 5.9 / 66 | 7.3 | 94 K | 114 |
| 01189995 Farmington R. at Tariffville | 10/3 | 232 / 98 | 190 | 20.5 | 8.3 / 92 | 7.2 | 62 K | 39 |
| 01190070 Connecticut R. at Hartford | 10/10 | -- / -- | 171 | 17.0 | 8.6 / 88 | 7.5 | 35 | <1 K |
| 01193050 Connecticut R. at Middle Haddam | 10/10 | -- / -- | 182 | 18.5 | 6.8 / 72 | 7.4 | 1 K | 4 K |
| 01193500 Salmon R. near East Hampton | 10/18 | 52.6 / 74 | 126 | 11.0 | 11.2 / 101 | 7.8 | 74 | 11 K |
| 01196500 Quinnipiac R. at Wallingford | 10/29 | 128 / 59 | 313 | 9.0 | 10.5 / 91 | 7.5 | 3,700 | 580 |
| 01198125 Housatonic R. near Ashley Falls, MA | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01201487 Still R. at Rt. 7 at Brookfield Center | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01205500 Housatonic R. at Stevenson | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01208049 Naugatuck R. near Waterville | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01208500 Naugatuck R. at Beacon Falls | | | | | SITE NOT SAMPLED THIS MONTH | | | |
| 01208990 Saugatuck R. near Redding | 10/30 | 11.8 / 70 | 234 | 7.0 | 12.3 / 102 | 7.9 | 4 K | 12 K |
| 01209710 Norwalk R. near Winnipauk | 10/30 | 6.0 / -- | 364 | 8.0 | 13.7 / 116 | 7.7 | 36 | 24 |

GROUND-WATER LEVELS

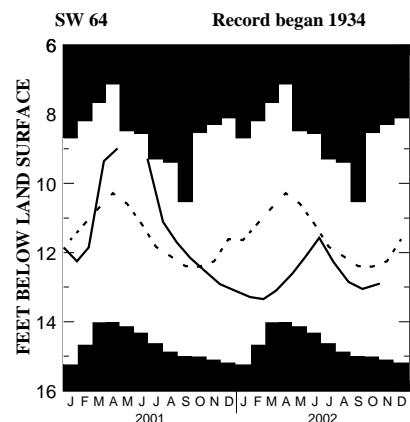
(Status of ground-water storage as indicated by water level changes in observation wells,
as shown on hydrographs)

- Shaded area on graphs show highest and lowest water levels of record through calendar year 2001.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 2000.

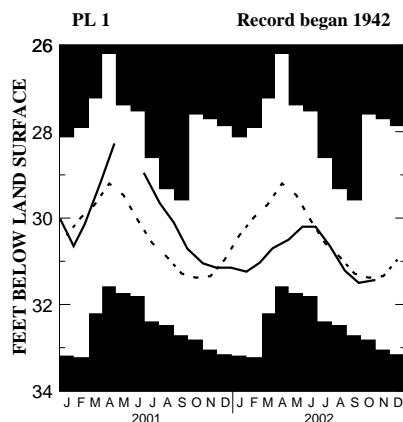
MANSFIELD



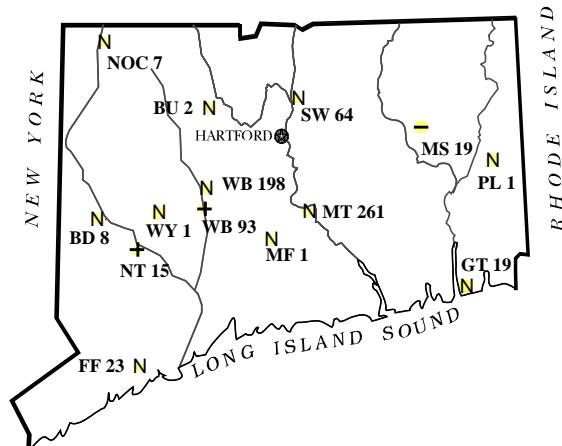
SOUTH WINDSOR



PLAINFIELD



MASSACHUSETTS



ABOVE NORMAL

Within the highest 25%
of record for this month.



NORMAL RANGE

Between the highest and lowest 25%
of record for this month.

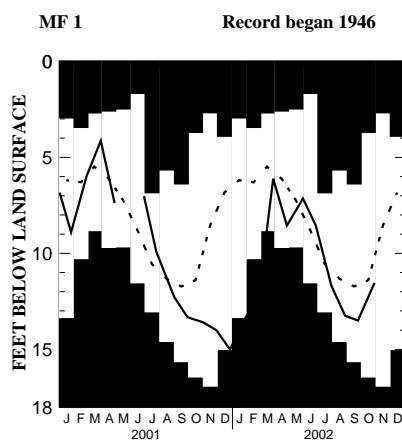


BELOW NORMAL

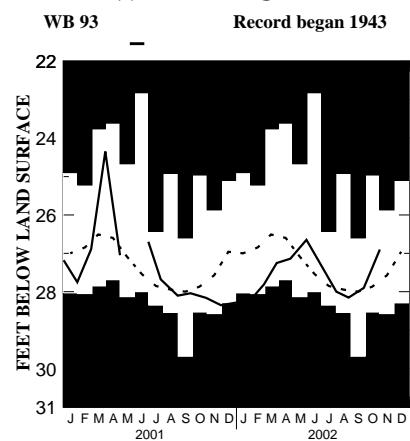
Within the lowest 25%
of record for this month.



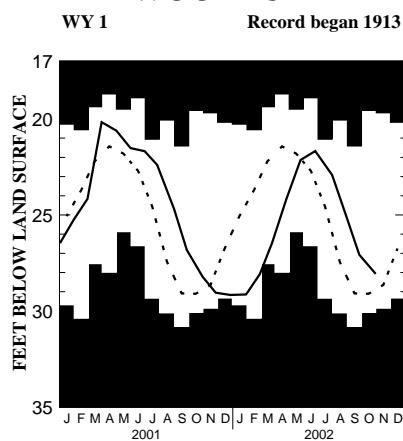
MIDDLEFIELD



WATERBURY



WOODBURY



GROUND-WATER LEVELS

Six low and two high ground-water levels were recorded during October 2002. One low for the period of record also was established during October 2002.

Ground-water levels are in feet below land surface. Maximum and minimum values are from end-of-the month readings and may not be the highest or lowest recorded during the month. Statistics are based on period of record (through calendar year 2000). Ground-water level data are collected by USGS personnel and individual observers.

Because of current conditions, measurements are being made in selected wells on a weekly or twice-a-month basis. In some wells, this causes the column labeled OCT. MIN or MAX to have a value in October 2002 that is not the same value as reported in the column labeled OCT. 2002, which is the last measurement for the month.

| WELL NUMBER AND TOWN | GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE | | | | | | | | NEW RE-CORD | YR RECORD BEGAN |
|-----------------------|---|---------------|--------------|---------------------------|---------------------------|----------------|-------|-------------------|-------------|-----------------|
| | OCT. 2002 (DATE) | SEPT. 2002 | OCT. 2001 | OCT. MAX (YR RECORDED) | OCT. MIN (YR RECORDED) | OCT. MEDIAN | | | | |
| BD 8 (Brookfield) | 32.49 | 30 | 32.44 | 32.32 | 27.61 | 1975 | 33.09 | 1998 | 32.03 | 1966 |
| BU 2 (Burlington) | 32.74 | 30 | 28.24 | 34.06 | 16.01 | 1955 | 35.28 | 1964 | 29.81 | 1946 |
| BU 143 (Burlington) | 9.46 | 30 | 10.19 | 10.73 | 3.79 | 1996 | 10.73 | 2001 | 9.01 | 1996 |
| BU 144 (Burlington) | 2.65 | 30 | 2.87 | 2.79 | 2.40 | 1999 | 2.79 | 2001 | 2.60 | 1996 |
| CL 223 (Clinton) | 6.87 | 28 | 9.07 | 9.96 | 5.37 | 1999 | 12.43 | 1997 | 8.62 | 1991 |
| CL 224 (Clinton) | 22.19 | 28 | 22.38 | 22.28 | 21.23 | 1992 | 23.11 | 1997 | 21.92 | 1991 |
| CL 225 (Clinton) | 5.97 | 28 | 7.12 | 7.50 | 5.75 | 1996 | 9.72 | 1997 | 6.79 | 1991 |
| CO 335 (Colchester) | 7.73 | 28 | 8.25 | 8.38 | 6.24 | 1989 | 8.38 | 2001 | 7.61 | 1986 |
| CV 51 (Coventry) | 6.08 | 29 | 6.85 | 7.12 | 4.60 | 1996 | 7.12 | 2001 | 5.78 | 1992 |
| D 116 (Durham) | 2.40 | 28 | 8.33 | 8.14 | 0.33 | 1989 | 8.84 | 1986 | 5.14 | 1986 |
| D 117 (Durham) | 10.26 | 28 | 11.95 | 12.54 | 6.69 | 1996 | 13.84 | 1986 | 11.52 | 1986 |
| D 119 (Durham) | 0.39 | 28 | 0.88 | 1.63 | 0.15 | 1989 | 2.69 | 1986 | 1.05 | 1986 |
| D 120 (Durham) | 2.01 | 28 | 2.83 | 2.86 | 1.40 | 1989 | 3.56 | 1986 | 2.61 | 1986 |
| EL 82 (Ellington) | 6.38 | 29 | 6.47 | 5.38 | 5.38 | 2001 | 6.40 | 1997 | 6.24 | 1987 |
| EL 139 (Ellington) | DRY | 29 | DRY | DRY | 22.62 | 1995 | DRY | 97/98/ 2000-02 | 24.75 | <,<< |
| EL 140 (Ellington) | 21.26 | 29 | 20.91 | 21.29 | 12.94 | 1995 | 21.29 | 2001 | 17.86 | 1993 |
| EW 133 (East Windsor) | 5.61 | 29 | 5.76 | 5.63 | 4.58 | 1989 | 5.66 | 1988 | 5.40 | 1986 |
| EW 134 (East Windsor) | 52.10 | 29 | 52.20 | 51.52 | 49.48 | 1989 | 52.10 | 2002 | 51.14 | < 1986 |
| FF 23 (Fairfield) | 7.95 | 31 | 8.28 | 8.28 | 7.03 | 1989 | 9.12 | 1997 | 8.06 | 1966 |
| FF 30 (Fairfield) | 5.75 | 31 | 8.45 | 10.54 | 1.25 | 1996 | 12.41 | 1995 | 9.25 | 1993 |
| FF 31 (Fairfield) | 9.20 | 31 | 10.64 | 13.62 | 4.43 | 1996 | 13.62 | 2001 | 8.81 | 1993 |
| FF 32 (Fairfield) | 5.90 | 31 | 7.56 | 10.47 | 5.82 | 1996 | 13.44 | 1998 | 10.56 | 1993 |
| FF 33 (Fairfield) | 4.90 | 31 | 5.35 | 4.75 | 4.68 | 1996 | 6.65 | 1994 | 5.63 | 1993 |
| GR 328 (Granby) | 17.71 | 30 | 16.62 | 17.09 | 11.83 | 1995 | 17.71 | 2002 | 15.33 | < 1981 |
| GR 329 (Granby) | 11.93 | 30 | 11.48 | 11.80 | 3.75 | 1996 | 13.08 | 1988 | 10.80 | 1982 |
| GR 330 (Granby) | 2.88 | 30 | 3.38 | 3.19 | 2.40 | 1996 | 4.12 | 1982 | 3.54 | 1982 |
| GR 331 (Granby) | 9.66 | 30 | 12.86 | 12.36 | 5.74 | 1999 | 11.38 | 1988 | 10.46 | 1983 |
| GT 19 (Groton) | 16.45 | 27 | 16.33 | 16.45 | 12.90 | 1977 | 17.80 | 1963 | 16.50 | 1958 |
| HM 445 (Hamden) | 27.15 | 31 | 31.90 | 32.42 | 23.49 | 1999 | 32.42 | 2001 | 28.88 | 1988 |
| HM 446 (Hamden) | 3.75 | 31 | 3.60 | 3.95 | 3.32 | 1999 | 3.97 | 1994 | 3.84 | 1993 |
| HM 447 (Hamden) | 3.35 | 31 | 3.47 | 3.62 | 2.52 | 1995 | 3.76 | 1997 | 3.52 | 1993 |
| HM 448 (Hamden) | 13.82 | 31 | 14.35 | 14.29 | 12.22 | 1993 | 14.38 | 1997 | 13.88 | 1993 |
| HM 449 (Hamden) | 14.80 | 31 | 19.66 | 21.25 | 14.80 | 2002 | 21.25 | 2001 | 17.80 | > 1993 |
| HM 450 (Hamden) | 11.90 | 31 | DRY | 13.75 | 11.90 | 2002 | 13.75 | 2001 | 13.34 | > 1993 |

| WELL NUMBER AND TOWN | GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE | | | | | | | | NEW RECORD | YR RECORD BEGAN |
|------------------------|---|------------|-----------|------------------------|------------------------|-------------|-------|---------|------------|-----------------|
| | OCT. 2002 (DATE) | SEPT. 2002 | OCT. 2001 | OCT. MAX (YR RECORDED) | OCT. MIN (YR RECORDED) | OCT. MEDIAN | | | | |
| MB 32 (Marlborough) | 7.47 | 28 | 8.50 | 10.38 | 1.36 | 1989 | 10.80 | 1997 | 7.75 | |
| MB 35 (Marlborough) | 17.05 | 28 | 17.59 | 17.52 | 9.55 | 1996 | 18.74 | 1993 | 14.90 | |
| MB 36 (Marlborough) | 6.68 | 28 | 8.40 | 9.20 | 2.64 | 1996 | 9.20 | 2001 | 5.68 | |
| MF 1 (Middlefield) | 11.54 | 28 | 13.50 | 13.59 | 3.70 | 1989 | 16.44 | 1964 | 11.37 | |
| MS 19 (Mansfield) | 14.46 | 29 | 13.90 | 13.80 | 10.08 | 1977 | 15.12 | 1965/66 | 13.25 | |
| MS 44 (Mansfield) | 3.78 | 29 | 5.96 | 8.57 | 0.77 | 1990 | 9.63 | 1997 | 5.91 | |
| MS 45 (Mansfield) | 14.44 | 29 | 14.88 | 14.29 | 11.65 | 1996 | 14.44 | 2002 | 13.14 | < |
| MS 46 (Mansfield) | 15.20 | 29 | 15.53 | 15.10 | 13.29 | 1996 | 15.20 | 2002 | 14.35 | < |
| MS 74 (Mansfield) | 10.18 | 29 | 9.68 | 10.62 | 2.73 | 1996 | 10.85 | 1997 | 9.28 | |
| MS 75 (Mansfield) | 16.22 | 29 | 14.69 | 17.30 | 12.87 | 1996 | 19.83 | 1997 | 17.92 | |
| MS 76 (Mansfield) | 34.55 | 29 | 34.30 | 36.14 | 30.90 | 2000 | 36.14 | 2001 | 34.00 | |
| MS 77 (Mansfield) | 10.27 | 29 | 9.75 | 10.47 | 2.70 | 1996 | 10.68 | 1997 | 8.00 | |
| MT 261 (Middletown) | 24.45 | 28 | 23.88 | 25.16 | 19.48 | 1989 | 26.92 | 1964 | 23.70 | |
| NHV 201 (North Haven) | 16.73 | 31 | 17.24 | 17.14 | 14.83 | 1989 | 18.25 | 1986 | 16.71 | |
| NOC 7 (North Canaan) | 9.54 | 31 | 10.07 | 9.78 | 8.20 | 1983 | 10.54 | 1997 | 9.71 | |
| NSN 77 (N. Stonington) | 15.88 | 28 | 16.15 | 15.40 | 10.09 | 1996 | 17.33 | 1993 | 14.22 | |
| NSN 78 (N. Stonington) | 4.19 | 28 | 5.00 | 5.12 | 3.85 | 1996 | 5.12 | 2001 | 4.40 | |
| NT 15 (Newtown) | 4.65 | 31 | 6.98 | 8.04 | 1.88 | 1975 | 11.14 | 1988 | 8.26 | |
| PL 1 (Plainfield) | 31.43 | 30 | 31.50 | 31.05 | 27.59 | 1955 | 32.80 | 1965 | 31.38 | |
| SB 30 (Southbury) | 21.43 | 30 | 21.30 | 20.95 | 16.90 | 1996 | 22.13 | 1995 | 20.42 | |
| SB 39 (Southbury) | 7.64 | 30 | 7.98 | 7.71 | 4.96 | 1996 | 7.71 | 2001 | 7.28 | |
| SB 41 (Southbury) | 52.35 | 30 | 53.60 | 52.76 | 45.65 | 1996 | 54.72 | 1995 | 50.41 | |
| SB 42 (Southbury) | 21.38 | 30 | 22.60 | 19.91 | 12.10 | 1996 | 21.38 | 2002 | 16.20 | < |
| SC 19 (Scotland) | 8.10 | 29 | 9.37 | 11.03 | 2.01 | 1996 | 11.44 | 1997 | 8.80 | |
| SC 20 (Scotland) | 10.81 | 29 | 10.35 | 10.82 | 4.72 | 1996 | 11.76 | 1993 | 9.93 | |
| SC 21 (Scotland) | 0.86 | 29 | 1.06 | 1.51 | 0.40 | 1996 | 1.74 | 1997 | 0.95 | |
| SC 22 (Scotland) | 13.69 | 29 | 13.87 | 14.01 | 11.05 | 1996 | 14.57 | 1993 | 13.65 | |
| SC 23 (Scotland) | 1.71 | 29 | 2.14 | 2.73 | 1.38 | 1993 | 2.99 | 2000 | 2.41 | |
| SM 7 (Salem) | 13.26 | 28 | 13.25 | 13.26 | 7.40 | 1989 | 13.90 | 1997 | 13.15 | |
| SW 64 (S. Windsor) | 12.90 | 31 | 13.05 | 12.53 | 8.53 | 1975 | 14.99 | 1966 | 12.51 | |
| SY 15 (Salisbury) | 15.55 | 30 | 15.00 | 15.71 | 13.63 | 1989 | 16.99 | 1993 | 15.23 | |
| SY 23 (Salisbury) | 10.62 | 30 | 13.91 | 14.82 | 4.55 | 1989 | 16.11 | 1993 | 9.12 | |
| SY 24 (Salisbury) | 14.62 | 30 | 17.30 | 16.77 | 9.95 | 1989 | 18.77 | 1997 | 14.15 | |
| WB 93 (Waterbury) | 26.90 | 31 | 27.90 | 28.16 | 24.24 | 1998 | 28.53 | 1964 | 27.85 | |
| WB 198 (Waterbury) | 19.20 | 31 | 23.20 | 20.51 | 9.04 | 1955 | 21.76 | 1988 | 17.37 | |
| WY 1 (Woodbury) | 28.07 | 30 | 27.07 | 28.21 | 19.56 | 1955 | 33.00 | 1914 | 29.16 | |
| | | | | | | | | | | 1913 |

New records: >, new record high for month; >>, new record high for period of record; <, new record low for month;
 <<, new record low for period of record; *, median not calculated--number shown is mean; NA, not available; OBS, obstructed;
 +, water level above ground surface; --, not measured